

REMARKS

Entry of the foregoing and further and favorable consideration of the subject application pursuant to 37 C.F.R. § 1.114 are respectfully requested.

As correctly stated in the Official Action, Claims 1-8, 10, and 13-22 are pending in the present application. Claims 1-8, 10, and 13-22 stand rejected.

By the present amendment, Claims 1 and 16 have been amended to incorporate Claims 18 and 21, respectively. Claims 18 and 21 have been canceled. Claims 17 and 20 have been amended to delete subject matter appearing in Claims 1 and 16 by the present amendment. Claims 19 and 22 have been amended to independent form. Although Claim 22 added in the previous response appeared to previously depend from Claim 1, it was intended to depend from independent Claim 16. (This is readily apparent as Claims 19 and 22 would otherwise be identical.) The preamble of Claim 20, which depends from Claim 16 (a method claim), has been amended to recite a "method," rather than an "absorbent article." By the present amendment, Claim 22 has been amended to incorporate the subject matter of Claim 16. Accordingly, no new matter has been added.

Rejections Under 35 U.S.C. § 102(b)

Claims 1, 3, 5, and 16-22 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,837,343, hereinafter *Mesek*. *Mesek* discloses an absorbent article that includes a liquid-impervious layer 12, and absorbent layer 14, and a facing layer 16. The facing layer 16 is **hydr philic** in almost all of the layer, except for some peripheral areas that do not extend over the absorbent layer 14. Thus, there are **n**

hydrophobic portions of the facing layer 16 over the absorbent layer 14. Applicants note that the description of *Mesek* on page 7 of the previous response submitted on June 11, 2002, was incorrect. By the present amendment, Claims 18 and 21 have been canceled, thereby mooting this rejection as it applies to these claims.

Independent Claims 1, 16, 19, and 22 recite that the absorbent article includes a liquid-pervious surface layer. The liquid-pervious surface layer is defined as including a wetting region and "remaining parts of the liquid-pervious surface layer." The wetting region is defined as the region of the liquid-pervious surface layer which is intended to first be wetted by body fluid emitted to the article. Claims 1, 16, 19 and 22 define that the wetting region comprises a hydrophilic absorbent material, and that all of the "remaining parts" are constituted of a hydrophobic material. Further, Claims 1 and 16, by the present amendment, recite that the extent of the wetting region is smaller than an extent of the absorbent body. Newly independent Claims 19 and 22 recite that at least a portion of the remaining parts of the liquid-pervious surface layer extend over the absorbent body.

In view of the definition in the claims, in addition to the detailed disclosure set forth in the specification and drawings, as well as knowledge readily available to one of ordinary skill in the art, it is clear that the wetting region is merely a part of the liquid-pervious layer over the absorbent body, and does not include the entire portion of the liquid-pervious surface layer that extends over the absorbent body. Further, the claims require that at least a portion of the "remaining parts" do extend over the absorbent body. See, for example, Figure 1 of the present application.

With this construction of the independent claims in mind, it is clear that *Mesek* does not teach or suggest an article, wherein the remaining parts of the liquid-pervious surface layer are constituted of a hydrophobic material. As can be readily seen from Figure 9, *Mesek* only discloses or suggests an absorbent article that possesses some hydrophobic portion only around the very edge of the article and not extending over the absorbent body. Nowhere does *Mesek* disclose or suggest that the wetting region is smaller than the extent of the absorbent body (Independent Claims 1 and 16) nor where at least a portion of the remaining parts of the liquid-pervious surface layer extend over the absorbent body (Independent Claims 19 and 22). An examination of the Figures and disclosure of *Mesek* reveals no such thing.

Applicants respectfully submit that the Examiner's summary of Figure 9 of *Mesek*, as applied to Claims 17-22, on page 3 of the current Office Action is incorrect. Initially, Applicants note that the current independent Claims 1, 16, 19, and 22 now incorporate the limitations of previous Claims 18, 21, 19, and 22, respectively. The Examiner argues that the wetting region may, for example, be the middle portion of the layer between the 3rd and 4th dashed lines of Figure 9 of *Mesek*. Even if this were true, all remaining parts of the surface are still not hydrophobic as required by the current claims. Only the periphery (116a) of the absorbent article in Figure 9 of *Mesek* does not meet the language of any of the present claims.

That the presently claimed invention differs dramatically from the absorbent article of *Mesek* is also reinforced by the intent of the presently claimed invention. The presently claimed invention presents a novel article and method for maintaining the moisture of the

mucous membranes of the wearer using hydrophilic material adjacent to the mucous membranes, while providing absorptive function and maintaining the comfort of the wearer by keeping all remaining parts dry through the use of hydrophobic material. *Mesek* does not disclose or suggest such a purpose. The article of *Mesek* will have a much larger hydrophilic region than that of the article of the present claims, and thus may appear damp and uncomfortable to a user, compared to the presently claimed article, wherein only the wetting region is hydrophilic. In fact, all *Mesek* discloses is an absorbent article wherein "[m]arginal portions of the bonded fabric are not treated with a wetting agent, so that these portions of the fabric throughout their dimensions are more or less water repellent."

Abstract, lines 12-15. The intent of *Mesek* is to prevent urine from wicking outward and leaking out of the diaper. Abstract, lines 18-22 and col. 2, lines 33-39.

Applicants further note that the Examiner argues on page 7 of the current Office Action that the smaller hydrophilic region is not recited in the rejected claims. By the present amendment, it is believed that all claims now incorporate such a limitation where the hydrophobic region extends over the absorbent body or where the wetting region is smaller than the absorbent body.

Accordingly, in view of the fact that all of the remaining parts of the liquid-pervious surface layer are defined as constituted of a hydrophobic material, *Mesek* clearly does not teach or suggest the present independent claims 1, 16, 19 and 22.

Claims 3, 5, and 17 depend from Claim 1, and are thus also patentable over *Mesek* at least for the reasons set forth above with respect to Claim 1. Claim 20 depends from

Claim 16, and is thus also patentable over *Mesek* at least for the reasons set forth above with respect to Claim 16.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 4, 6, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Mesek*. Claims 2, 7, 8, and 13-15 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious in view of *Mesek* in further view of U.S. Patent No. 5,885,268 to *Bien et al.*, hereinafter *Bien*.

These rejections are respectfully traversed.

Claims 4, 6, and 10 depend from claim 1, and are thus also patentable over *Mesek* at least for the reasons set forth above with respect to claim 1.

Bien has been relied upon by the Examiner for its alleged teaching of a hump. Accordingly, *Bien* does not otherwise overcome the rejection of claim 2.

With regard to claim 7, the Examiner alleges that *Bien* teaches a hydrophobic layer and a hydrophilic layer. In any event, *Bien* does not overcome the deficiency of the rejection of claim 1 based on *Mesek*.

Furthermore, with regard to the rejections of claims 13-15, *Bien* does not overcome the deficiency of the rejection of claim 1. Accordingly, all of the pending rejections should be withdrawn.

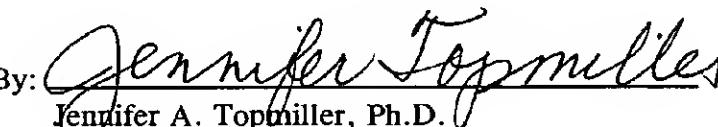
Conclusion

From the foregoing, further and favorable consideration in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 
Jennifer A. Tophmiller, Ph.D.
Registration No. 50,435

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: January 31, 2003

Attachment to Reply & Amendment dated January 31, 2003

Marked-up Claims 1, 16, 17, 19, 20, and 22

1. (Four Times Amended) Absorbent article for maintaining mucous membranes of a user moist, the absorbent article comprising:

a liquid-pervious surface layer,

a liquid-impervious surface layer, and

an absorbent body enclosed between the two surface layers,

wherein the article further exhibits a wetting region adapted to be disposed adjacent the mucous membranes of the user, which is the region of the liquid-pervious surface layer which is intended to first be wetted by body fluid emitted to the article,

wherein the liquid-pervious surface layer within the wetting region is constituted of hydrophilic absorbent material that is adapted to retain moisture, at least at the surface of the liquid-pervious surface layer which is intended to be facing the user during use so as to maintain the mucous membranes of the user moist, and that all remaining parts of the liquid-pervious surface layer are constituted of a hydrophobic material, and

wherein an extent of the wetting region is smaller than an extent of the absorbent body.

16. (Twice Amended) A method for maintaining a mucous membrane of a user moist with an absorbent article, the absorbent article including an absorbent body, a liquid impervious layer, and a liquid pervious layer, the liquid pervious layer constituting both a hydrophobic material and a hydrophilic absorbent material, where the hydrophilic absorbent

Attachment to Reply & Amendment dated January 31, 2003

Marked-up Claims 1, 16, 17, 19, 20, and 22

material forms a wetting region of the liquid pervious layer that is a region that is intended to be first wetted by body fluid and all remaining parts of the liquid-pervious layer are hydrophobic, the absorbent body being enclosed between the liquid pervious layer and the liquid impervious layer, the method comprising:

wearing the absorbent article such that the wetting region is adjacent the mucous membrane of the user and the wetting region receives body fluids emitted from the user;

retaining at least a portion of the body fluids in the hydrophilic absorbent material;

and

maintaining the mucous membrane of the user moist with the body fluids retained in the hydrophilic absorbent material of the wetting region.

wherein an extent of the wetting region is smaller than an extent of the absorbent body.

17. (Amended) Absorbent article according to claim 1, [wherein an extent of the wetting region is smaller than an extent of the absorbent body, and] wherein the wetting region covers at least a portion of the absorbent body.

19. (Amended) Absorbent article [according to claim 1,] for maintaining mucous membranes of a user moist, the absorbent article comprising:
a liquid-pervious surface layer,

Attachment to Reply & Amendment dated January 31, 2003

Marked-up Claims 1, 16, 17, 19, 20, and 22

a liquid-impermeable surface layer, and

an absorbent body enclosed between the two surface layers,

wherein the article further exhibits a wetting region adapted to be disposed adjacent
the mucous membranes of the user, which is the region of the liquid-pervious surface layer
which is intended to first be wetted by body fluid emitted to the article,

wherein the liquid-pervious surface layer within the wetting region is constituted of
hydrophilic absorbent material that is adapted to retain moisture, at least at the surface of
the liquid-pervious surface layer which is intended to be facing the user during use so as to
maintain the mucous membranes of the user moist, and that all remaining parts of the
liquid-pervious surface layer are constituted of a hydrophobic material, and
wherein at least a portion of the remaining parts of the liquid-pervious surface layer extend
over the absorbent body.

20. (Amended) [Absorbent article] The method according to claim 16, [wherein
an extent of the wetting region is smaller than an extent of the absorbent body, and]
wherein the wetting region covers at least a portion of the absorbent body.

22. (Amended) [Absorbent article according to claim 1,] A method for
maintaining a mucous membrane of a user moist with an absorbent article, the absorbent
article including an absorbent body, a liquid impermeable layer, and a liquid pervious layer,

Attachment to Reply & Amendment dated January 31, 2003

Marked-up Claims 1, 16, 17, 19, 20, and 22

the liquid pervious layer constituting both a hydrophobic material and a hydrophilic absorbent material, where the hydrophilic absorbent material forms a wetting region of the liquid pervious layer that is a region that is intended to be first wetted by body fluid and all remaining parts of the liquid-pervious layer are hydrophobic, the absorbent body being enclosed between the liquid pervious layer and the liquid impervious layer, the method comprising:

wearing the absorbent article such that the wetting region is adjacent the mucous membrane of the user and the wetting region receives body fluids emitted from the user;
retaining at least a portion of the body fluids in the hydrophilic absorbent material;
and

maintaining the mucous membrane of the user moist with the body fluids retained in the hydrophilic absorbent material of the wetting region,
wherein at least a portion of the remaining parts of the liquid-pervious surface layer extend over the absorbent body.